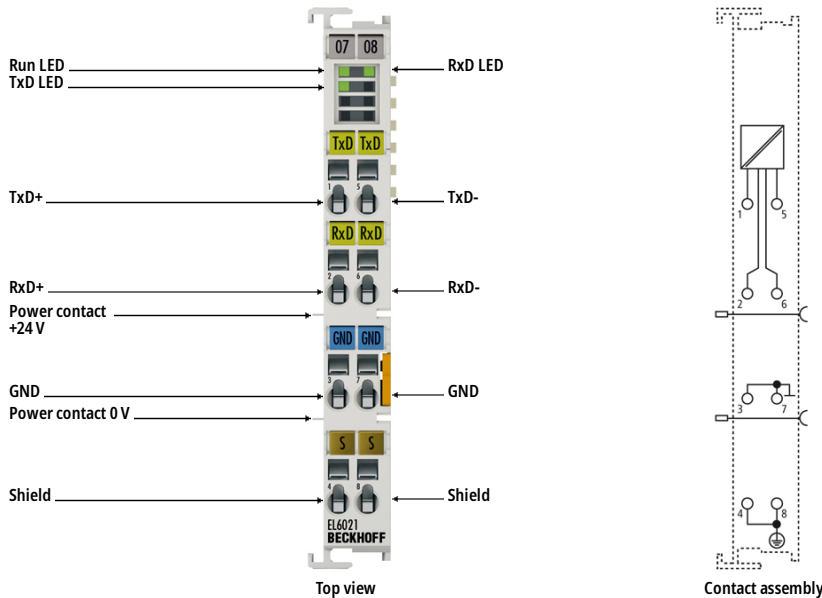
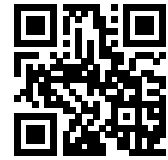


EL6021 | EtherCAT Terminal, 1-channel communication interface, serial, RS422/RS485



i Product status: Regular delivery

The EL6021 serial interface enables the connection of devices with RS422 or RS485 interface. These devices communicate with the automation device via the coupler. The active communication channel operates independently of the higher-level bus system in full or half duplex mode at up to 115.2 kbaud. The transmission of differential signals according to RS422 guarantees high immunity to interference through electrically isolated signals.

In conjunction with the TwinCAT Virtual Serial COM Driver (see TwinCAT Supplements – Communication) the EL6021 can be used as a normal Windows COM interface.

Product information

Technical data

| Technical data | EL6021, ES6021 |
|---------------------------|--|
| Connection technology | terminal contact |
| Data transfer channels | TxD and RxD, full/half duplex |
| Data transfer rates | 2400...115,200 baud; default: 9600 baud, 8 data bits, no parity and one stop bit |
| Bit transfer | with differential signal |
| Interfaces | 1 x RS422/RS485 |
| Line impedance | 120 Ω |
| Cable length | approx. 1000 m twisted pair |
| Providing external supply | – |

| | |
|------------------------------------|--|
| Power supply | via the E-bus |
| Distributed clocks | – |
| Electrical isolation | 500 V (E-bus/signal voltage) |
| Data buffer | 864 bytes receive buffer, 128 bytes transmit buffer |
| Configuration | no address setting, configuration via PLC |
| Current consumption power contacts | – |
| Current consumption E-bus | typ. 170 mA |
| Weight | approx. 55 g |
| Operating/storage temperature | -25...+60 °C/-40...+85 °C |
| Relative humidity | 95 %, no condensation |
| Vibration/shock resistance | conforms to EN 60068-2-6/EN 60068-2-27 |
| EMC immunity/emission | conforms to EN 61000-6-2/EN 61000-6-4 |
| Protect. rating/installation pos. | IP20/variable |
| Pluggable wiring | for all ESxxx terminals |
| Approvals/markings | CE, UL, ATEX, IECEx, cFMus |
| Ex marking | <p>ATEX: II 3 G Ex nA IIC T4 Gc</p> <p>IECEx: Ex nA IIC T4 Gc Ex tc IIIC T135 °C Dc</p> <p>cFMus: Class I, Division 2, Groups A, B, C, D Class I, Zone 2, AEx ec IIC T4 Gc</p> |

| Housing data | EL-12-8pin | ES-12-8pin |
|-----------------------------------|---|---|
| Design form | compact terminal housing with signal LEDs | terminal housing with pluggable wiring level |
| Material | polycarbonate | |
| Dimensions (W x H x D) | 12 mm x 100 mm x 68 mm | |
| Installation | on 35 mm DIN rail, conforming to EN 60715 with lock | |
| Side by side mounting by means of | double slot and key connection | |
| Marking | labeling of the BZxxx series | |
| Wiring | solid conductor (e), flexible conductor (f) and ferrule (a): spring actuation by screwdriver | |
| Connection cross-section | s*: 0.08...2.5 mm ² , st*: 0.08...2.5 mm ² , f*: 0.14...1.5 mm ² | s*: 0.08...1.5 mm ² , st*: 0.08...1.5 mm ² , f*: 0.14...1.5 mm ² |
| Connection cross-section AWG | s*: AWG 28...14, st*: AWG 28...14, f*: AWG 26...16 | s*: AWG 28...16, st*: AWG 28...16, f*: AWG 26...16 |
| Stripping length | 8...9 mm | 9...10 mm |
| Current load power contacts | I _{max} : 10 A | |

*s: solid wire; st: stranded wire; f: with ferrule

Ordering information

| Special terminals | |
|-------------------|---|
| EL6021 | EtherCAT Terminal, 1-channel communication interface, serial, RS422/RS485 |
| ES6021 | EtherCAT Terminal, 1-channel communication interface, serial, RS422/RS485, pluggable wiring |
